

## A new *Telmatobius* and new *Teiidoid* lizards from South America.

By

LARS GABRIEL ANDERSSON.

With 3 Figures in the Text.

Communicated April 8 1914 by HJ. THÉEL and E. LÖNNBERG.

### *Telmatobius duseni* n. sp.

Vomerine teeth in two slightly separated, small, but distinct groups behind the choanæ, which are moderate. Tongue large, round, a little broader than long, not nicked behind. Head short, flattened; snout short, rounded, longer than the diameter of the eye; nostril midway between the eye and the margin of the tip of the snout. Canthus rostralis indistinct. Interorbital space as broad as, or broader, than the upper eyelid; no tympanum. Fingers narrow, rather long, free, the first not reaching as far as the second. Toes one third to scarcely halfwebbed; the formula for the development of the web is:

$$\frac{\text{—}}{1,5'} \frac{2,5}{1,8-2'} \frac{3}{2-2,5'} \frac{3-3,8}{3-3,8'} \frac{1,5}{\text{—}}$$

(the figures indicate the number of joints free from web, if counted from first to fifth toe). If the length of the tibia is marked off from the knee forwards along the body, it reaches the front of the eye or the nostril. An oval inner and a small outer metatarsal tubercle (the latter not discernible on the right side in the largest of the specimens).

The whole upper surface is provided with densely scattered small tubercles, each usually ending in a rounded horny knob. On the back and on the upper parts of the sides the tubercles are to some extent arranged in longitudinal series, forming narrow folds which sometimes are rather regular and angularly bent, or, usually, short, straight or oblique, and then numerous. Under surfaces smooth, indistinctly granular on the thighs. A large nearly circular disc-shaped inguinal gland. The colour above varying from light grey to dark brown, sometimes indistinctly spotted with dark and white; on the middle of the back a light irregular spot in most of the specimens. Between the eyes a white crossband, darkened behind, sometimes beginning at the edges of the upper eyelids; inguinal gland dark and white. In the lightest specimen this colourpattern is rather indistinct, the specimen being more uniform; in the dark specimens there are some white spots in front of the gland as well. Thighs anteriorly and posteriorly spotted with white. Limbs faintly crossbanded; in the dark specimens the outer sides of the feet have some irregular light blotches. Broad dark band with narrow light interspaces radiate from the eye to the shoulder and to the oral border. Under surfaces yellowish dirty white, dotted with brown, or yellowish brown, more or less dark, marbled with lighter. Under parts of limbs yellowish white, more or less dotted with dark. Measurements of the largest and of the smallest specimens:

Total length 37; 31 mm.

Length of head to mandibular articulation 15; 12,8 mm.

Breadth of head at the angle of the mouth 17; 14 mm.

Length of snout 6; 5 mm.

Diameter of eye 5,2; 4,2 mm.

Length of femur 19; 16,3 mm.

» of tibia 18,5; 16 mm.

» of tarsus with 4<sup>th</sup> toe 26,2; 23 mm.

» of fore limb 23; 19,5 mm.

Diameter of inguinal gland 6; 5 mm.

Five specimens, all males, from Brazil, »Parana, Sierra do mar; Ypiranga, in crevices and cracks in the vertical cliffs along the railway, <sup>3</sup>/<sub>9</sub> 1911. By the natives called Sapo», according to a statement of Dr. P. DUSÉN who has collected and kindly presented them to the R. Zoological Museum

in Stockholm. I have at other opportunities as well had the pleasure of receiving new species of frogs from Dr. DUSÉN, and therefore I have named this new species after him.

*Telmatobius duseni* is nearly allied to *T. asper* BLGR (Ann. Mag. Nat. Hist. (7) 19 p. 394). With usual kindness Dr. G. A. BOULENGER has compared it with the type of the latter species. According to him »*T. asper* has the head longer in proportion to its width, so the toes are much more extensively webbed». Dr. BOULENGER states also in the letter which I have received from him that the males of his species as well are provided with inguinal glands which is not mentioned in the description quoted, whereas there »is no trace of it in females».

### **Proctoporus columbianus n. sp.**

Head and limbs rather short, body moderate; frontonasal quadrangular, distinctly longer than broad; frontal nearly as long as frontonasal, pentagonal, anteriorly nearly as broad as frontonasal, narrowed posteriorly. Frontoparietals moderate, forming a long suture, interparietal as large as parietals, considerably broader behind, angular anteriorly, rounded posteriorly; a pair of large occipitals, forming together a semicircular anterior margin enclosing the hind part of interparietal; a row of four large nuchals bordering the head-shields behind. Four supraoculars; a loreal; a row of large infraorbitals; temple shielded, three large temporals in contact with parietals and occipitals. Five or six upper labials, third to fifth largest, four lower labials; chin-shields, a single anterior and three or four pairs, the two or three first pairs forming a suture; the hindmost of the pairs which are in contact form but a short suture. Between and behind the chin-shields large gulars in two or three angular rows, and behind them eight transverse rows of quadrangular gulars including collar, regularly increasing in size towards the collar-shields which are largest and ten or eleven in number. Dorsal scales quadrangular, smooth, about twice and a half as long as broad, thirty-eight to forty-two scales from occiput to base of tail; some of the transverse bands of scales uninterrupted, some interrupted in the median dorsal line by

small irregular scales. At the shoulder and towards the groin the sides are provided with small oval scales, but on the middle of the body the lateral scales are as large as the dorsals; only a narrow band of one to three rows of scales separate them from the ventrals. Ventrals large, quadrangular, smooth, forming twelve longitudinal and twenty-two or twenty-three transverse series; forty-two to forty-five scales in all round the middle of the body. Præanals seven, an anterior pair and five posterior shields, the two outermost

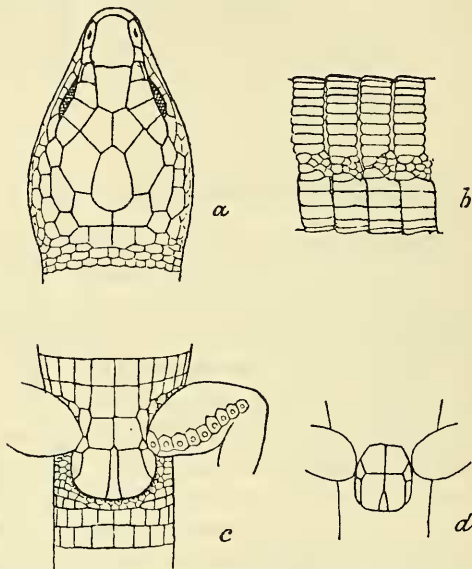


Fig. 1. *Proctoporus columbianus* n. sp. a. Upper view of head; b. lateral view of the middle of body; c. lower view of anal region in the male; d. anal plates in the female.

and the median one of which are narrow, the last being rather variable; in the males it is long and narrow, in the females only a small triangular shield at the posterior edge of the præanal field (Figs. c and d); the scales of the limbs as well are smooth. Femoral pores nine or ten; none of these may be termed præanal. Caudal scales similar to those of the body but without any row of small scales between the laterals and the ventrals.

Colour above and on the sides dark umber brown, lighter on the head; in the male there is a row of blackish lateral

spots usually with a small white dot at their hind margin. Below, the centres of the scales and plates are brown or blackish, with yellowish white margins more or less broad. In the male specimens the dark colour appears as blackish brown spots on the middle of the ventral plates, forming regular longitudinal rows of dark spots on the light belly and the under surface of the tail.

Four specimens, two males and two females from Colombia, obtained by mr NISSER already in the year 1833.

<i>Measurements:</i>	♂	♀
Length of head and body . . .	74 mm	72 mm
» » tail . . . . .	— »	93 »
» » head . . . . .	16 »	15 »
Width of head . . . . .	10 »	9 »
From end of snout to fore limb	26 »	25 »
Length of fore limb . . . . .	15,5 »	15 »
» » hind » . . . . .	21 »	20,5 »

It is with great hesitation I venture to describe these specimens, now kept in the R. Natural Museum for nearly a century, as a new species, but I am not able to find any species described in the literature neither of this genus, nor of the closely allied *Oreosaurus*, to which I can refer them. Considering the species of *Proctoporus* described, my species seems to be rather nearly allied to *P. meleagris* BLGR from Western Ecuador, but the latter differs in having »interparietal narrow not widened posteriorly, three occipitals, eight rows of shields between the chin-shields and the edge of the collar; collar-shields eight; thirty-four scales round the middle of the body; three præanal shields, eleven or twelve femoral pores on each side, two of which may be termed præanal. Black, upper parts minutely dotted with whitish». None of these characteristics are to be found in my specimens.

In other respects they appear to be more allied to *Proctoporus simoterus* O'SCHAUGN. which, however, is described on an anomalous specimen. The interparietal and the præanal shields seem to be of similar shape as in that species, but in other points, mentioned above, my specimens differ



from it as well. In addition to this the scales round the body are only thirty-six in *P. simoterus*.

Not being able to find any difference between the two genera, *Proctoporus* and *Oreosaurus*, I have also compared my specimens with the species of the genus *Oreosaurus*, but I have failed to identify them with any of the latter as well. They seem to be most similar to BOULENGER's species *Oreosaurus lævis*, described in the year 1908 (Ann. Mag. N. Hist. p. 521), distinguished by its quite smooth scales just as this one and also from the same habitat, Colombia. In many other characteristics, however, my specimens differ so strongly from *O. lævis* that there is no possibility to identify them. To judge from the description, *O. lævis* has much longer head and limbs, the interparietal, the occipitals, and the nuchals quite differently shaped, only six collar-shields, not more than thirty-four scales round the middle of the body, the ventrals only in eight longitudinal rows, and so on.

As mentioned above, I cannot find any constant difference between the two genera, and I refer this species as well as the following to the genus *Proctoporus* only because that the latter is of older date than the genus *Oreosaurus*.

### *Proctoporus longicaudatus* n. sp.

Head and limbs short; body rather elongate. Frontonasal quadrangular, longer than broad; frontal heptagonal, narrower and shorter than frontonasal, a little narrowed behind. Frontoparietals moderate, interparietal large, somewhat broader behind, heptagonal, angular anteriorly, rounded posteriorly, longer than the very broad parietals; a pair of large occipitals and a small median one, forming together a semicircular anterior margin, enclosing the hind part of the interparietal. A transverse row of four nuchals behind the occipitals, the median larger than the laterals; two large supraoculars and a postocular, the latter in contact with the parietals, three supraciliaries, the first very large, with an upper horizontal portion in front of the anterior supraocular, reaching the frontal (evidently this plate is formed by a coalasced first supraocular and a first supraciliary); four or five suboculars, the posterior large, the anterior small; a

præorbital (frenoorbital) resting on the second supralabial and in contact with the large first supraciliary; no loreal; a large nasal with the nostril pierced in the anterior part; temples shielded, a large superior temporal on the upper surface of the head forms an oblique suture with parietal and occipital; seven supralabials, the two posterior much smaller than the other, third below the eye; six lower labials, 5<sup>th</sup> and 6<sup>th</sup> very narrow. Chin-shields, one anterior and two pairs both in contact, the posterior pair touching each other

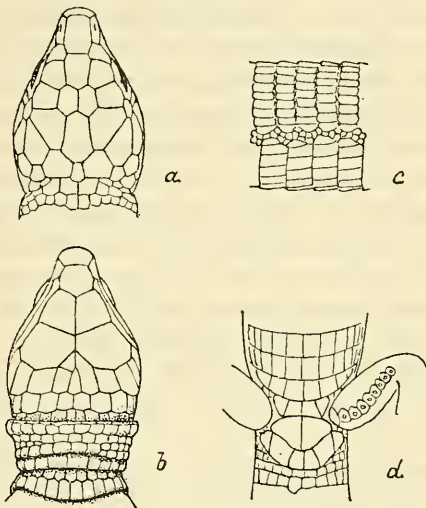


Fig. 2. *Proctoporus longicaudatus* n. sp. a. Upper view of head; b. Lower view of head; c. Lateral view of the middle of body; d. Anal region.  $\times 2$ .

only in front; behind the chin-shields three transverse rows of large gulars, decreasing in size behind, the posterior row bordered by a postmental collar which extends from the upper and posterior margin of the tympanum over the throat as a very distinct fold, formed by an anterior (inner) and a posterior (outer) row of plates; the free margin is formed by the anterior (inner) row which appears as a narrow rim in front of the posterior plates. Behind this fold there are five transverse rows, the third and fifth of which are composed of larger scales, forming a second and a third transverse fold, the latter is more distinct and corresponds to the usual

collar; the collarplates ten, rather elongate (twelve, if a lateral pair of scale-like plates is counted in).

Dorsal scales quadrangular, striated and keeled, once and a half as long as broad, nuchal scales smooth, rounded, in several series; forty-two transverse rows from occiput to base of tail; the rows interrupted on the median line by small scattered scales irregularly arranged. Behind the shoulder and in front of the groin the sides are covered with small oval scales, but on the middle of the sides the scales are similar to those of the back, the regular transverse rows continuing nearly to the ventrals from which they are separated only by a narrow strip of about two rows of small scales. Ventrals large, quadrangular, smooth, in twelve longitudinal rows (the outermost very small) and in twenty-three transverse ones; thirty-eight scales in all round the body. Præanals eight, an anterior pair and a posterior row of six plates, the outermost being rather small. Scales of limbs smooth; scales of the tail like those of the body. Femoral pores seven or eight, none of which may be termed præanal.

Uniform dark brown above; dirty yellowish grey below, with dark dots or marblings on each plate.

One specimen, a male, taken at Pelechucio, Western Bolivia, under a stone, <sup>27</sup>/<sub>3</sub> 1904. E. NORDENSKIÖLD and N. HOLMGREN.

Measurements: total length 54+84 mm.; length of head 12 mm; breadth of head 9 mm; from end of snout to fore limb 19 mm; length of fore limb 14 mm; length of hind limb 21 mm.

---

From the evidently nearly allied *Proctoporus unicolor* GRAY from Ecuador this species seems to differ in the following points: The supraoculars in my specimen are only two (three in *P. unicolor*), the median occipital in the former half as broad as the lateral ones, in the latter »frequently absent or very small», the chin-shields in *P. unicolor* are one anterior and four pairs and beside these »an additional pair», in my specimen a single anterior and only two pairs without any additional median one. Præanals five or seven in the posterior row in *P. unicolor*, six in my specimen. Femoral pores in *P. unicolor* 9—12 among which »one or two may be



termed præanal», in my specimen 7—8, among them no præanal. Although the body of my specimen is shorter than the specimen of *P. unicolor* measured by BOULENGER in *Cat. of Lizards* (54, respectively 63 mm), the limbs of the former are longer; fore limbs 14 and hind limbs 21 mm instead of 13 and 17 in *P. unicolor*. The tail is longer in my specimen, being 61 % of the total length (54+84 mm), only 54 % (63+75 mm) in *P. unicolor*.

In *Mitteilungen Naturhist. Museum in Hamburg* 1910 p. 30 FR. WERNER has described a species of *Proctoporus*, *P. bolivianus*, from Bolivia which also seems to be nearly allied to *P. unicolor* from which it differs to some extent in the same way as this one. It has, however, only 28 scales round the body, ventrals in 10 longitudinal and 26 transverse rows, eight long posterior anal plates, eight transverse rows of scales from the chin-shields to the first gular fold, three supraoculars, interparietal nearly twice as long as broad (in my specimen not quite 1 1/2 times as long as broad).

When more material for comparison has been obtained, it is possible that the differences, stated between *Pr. unicolor* and my species, as well as between these and that of WERNER, may be proved to be only individual ones, and thus my species synonymous with *P. unicolor* and *P. bolivianus*. With the present state of our knowledge I think, however, that the best proceeding is to regard it as a new species.

### *Prionodactylus holmgreni* n. sp.

Snout very long, body moderately elongate; a large rostral occupying a large space on the upper side of the snout; two frontonasals, quadrangular, each twice as long as broad. Præfrontals large, forming a long median suture. Frontal hexagonal, narrower behind, as long as its distance from the rostral; two frontoparietals; interparietal large, a little larger than parietals; three occipitals, the median the smallest; four nuchals, the median pair considerably larger than the lateral. Three supraoculars, anterior largest; anterior supraciliary large, widened anteriorly to the shape of a small first supraocular. Nostril in the middle of a single nasal, a loreal and a frenoorbital. A series

of infraoculars, the anterior small, one of the posterior much larger and wedged in between 4<sup>th</sup> and 5<sup>th</sup> supraoculars; temples with large shields; 7 upper labials, the four anterior largest, increasing in size to the 4<sup>th</sup> which is below the eye, the posterior smallest; 5 distinct lower labials. Chin-shields, a single anterior and five pairs, the four first pairs forming a suture (in the type-specimen the third pair separated by a small azygos plate), the fifth separated by small scales and much smaller than the anterior. Collar rather indistinct, formed only by three shields, the median of which is much the smallest, in front of the collar two longitudinal rows of enlarged gulars, ten in each row.

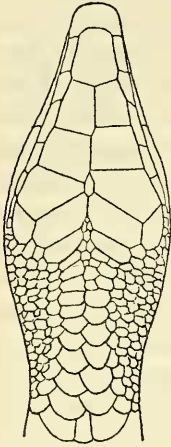


Fig. 3. *Prionodactylus holmgreni*  
n. sp.  
Lower view of head.  
× 5.

Dorsal scales elongate, hexagonal, juxtaposed, keeled; lateral scales similar to the dorsals but smaller and somewhat irregular; forty-three scales from occiput to base of tail. Ventral plates in eight longitudinal rows, outer row smaller, and twenty-two transverse rows. Thirty scales round the body, including ventrals. Four præanals in two pairs, the posterior considerably larger than the anterior.

Limbs with large smooth imbricated scales, hinder side of thigh and arm granulate; 7—8 femoral pores on each side; the lepidosis of the tail resembles that of the body.

Greenish brown above; a faint light dorsolateral line from above the ear, and three indistinct dark dorsal lines. A broad rather distinct black band from the eye, enclosing the ear, fading behind the axil, below margined by white. Upper lip, chin, and throat white, belly greenish white, dotted with black. Tail brownish, lighter below.

Measurements: Total length 32+78 mm; width of head 4 mm; from end of snout to ear 7,8 mm; from end of snout to fore limb 12,5 mm; fore limb 10 mm; hind limb 13 mm.

The specimen is a male, collected by Dr. N. HOLMGREN at San Fermin in the forest-region in the northwest of Bolivia, August 1904.

Evidently this species is nearly allied to *Pr. bolivianus*, described by FR. WERNER in *Zool. Anz.* 1899 p. 481, but I think it is well distinguished from that by the differences shown in the table below.

	<i>Pr. bolivianus</i>	<i>Pr. holmgreni</i>
Occipitals (Postoccipitalien according to Werner)	“klein, unregelmässig“	three, large, very regular
1 <sup>th</sup> , 3 <sup>th</sup> and 4 <sup>th</sup> upper labials	“gleich gross“	increasing in size from the first
2 <sup>d</sup> upper labial	“klein“ apparently smaller than the other	as large as the first
Enlarged gulars	“4 in jeder Längsreihe“	10 in each row
Collar-shields	8	3
Scales from occiput to base of tail	32 (“zum Sacrum“)	43
Transverse rows of ventrals	18	22
Præanals	6 (2+4)	4 (2+2)

The colour of the two species appears also to differ: According to WERNER *Pr. bolivianus* is »dunkelbraun mit zwei Schuppen breitem hellerem Längsband vom Occiput über die Vertebralregion»; no trace of this is to be seen in my specimen; instead of this a very faint dark line runs in the present specimen along the median line; in addition to this the dark distinct band present in my specimen from the snout through the eye, limited below by pure white, is not observed in *Pr. bolivianus*.

I have named this species in honour of my friend Dr. N. HOLMGREN who on his journeys in the Andes of Peru and Bolivia collected it as well as the type-specimen of foregoing species.

All the specimens described above belong to the collections of the R. Natural History Museum in Stockholm, and I beg to express my great gratitude to the Curator of the Vertebrate Department of this museum, my friend Professor E. LÖNNBERG, for his kind permission to let me examine them.



Tryckt den 30 juni 1914.